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Internet Development and Information Control in the People's Republic of China

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Summary

Since its founding in 1949, the People's Republic of China (PRC) has exerted great effort in manipulating the flow of information and prohibiting the dissemination of viewpoints that criticize the government or stray from the official Communist party view. The introduction of Internet technology in the mid-1990's presented a challenge to government control over news sources, and by extension, over public opinion. While the Internet has developed rapidly, broadened access to news, and facilitated mass communications in China, many forms of expression online, as in other mass media, are still significantly stifled.

Empirical studies have found that China has one of the most sophisticated content-filtering Internet regimes in the world. The Chinese government employs increasingly sophisticated methods to limit content online, including a combination of legal regulation, surveillance, and punishment to promote self-censorship, as well as technical controls. U.S. government efforts to defeat Internet "jamming" include funding through the Broadcasting Board of Governors to provide counter-censorship software to Chinese Internet users to access Voice of America (VOA) and Radio Free Asia (RFA) in China.

As U.S. investments in China and bilateral trade have surged in the past several years and China has developed its communications infrastructure, Chinese society has undergone rapid changes while the PRC government has continued to repress political dissent. Many U.S. observers, including government officials, have argued that economic openness and the growth of the Internet in China would help bring about political liberalization in China. However, contrary to facilitating freedom, some private U.S. companies have been charged with aiding or complying with Chinese Internet censorship. Private U.S. companies that provide Internet hardware, such as routers, as well as those that provide Internet services such as Web-log (blog) hosting or search portals, have been accused of ignoring international standards for freedom of expression when pursuing business opportunities in the PRC market.

In the 108th Congress, the provisions of the "Global Internet Freedom Act" (H.R. 48) were subsumed into the Foreign Relations Authorization Act of 2004-05 (H.R. 1950) and passed by the House on July 16, 2003. Christopher Cox reintroduced the bill (H.R. 2216) to the 109th Congress in May 2005. If passed, the act would authorize \$50 million for FY2006 and FY2007 to develop and implement a global Internet freedom policy. The act would also establish an office within the International Broadcasting Bureau with the sole mission of countering Internet jamming by repressive governments. On February 1, 2006, the Congressional Human Rights Caucus held a hearing entitled, "Human Rights and the Internet — The People's Republic of China." On February 15, 2006, the Subcommittee on Africa, Global Human Rights and International Operations of the House International Relations Committee will hold a joint hearing with the Subcommittee on Asia and the Pacific regarding the Internet and censorship in China.

This report will be updated periodically.

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Internet Development and Information Control in China (PRC)

The government of the People's Republic of China (PRC) places strict limitations on its domestic and foreign news media. Information that is considered "politically sensitive" or that conveys organized dissent and criticism of the Communist Party is not tolerated.¹ As a result, objective reporting on subjects such as China's human rights record, Tibetan independence, Falun Gong, Taiwan, or the 1989 Tiananmen crackdown, among other politically sensitive topics, are largely absent in China. Journalists have allegedly been harassed, sometimes with violence, and jailed for reporting content that is undesirable or that implicate government officials in corruption. In addition to reporting that is critical of the government, PRC leadership actively suppresses coverage of events that it considers a threat to social stability. State coverups of the early spread of HIV/AIDS, the Severe Acute Respiratory Syndrome (SARS) outbreak in April 2003, and fatal industrial disasters are notable examples of issues that have been censored in the Chinese media.²

Internet Development and Use in China³

In the early stages of its development, the Internet presented a challenge to Chinese government control over information flows and public opinion. In pursuit of economic growth and modernization, however, the government actively promoted Internet development. Because it is subject to PRC censorship, yet continues to spread news across national borders, the Internet has played a role in bringing international attention to issues forbidden in China, including PRC censorship itself.

Since the country's first connection in 1993, the Internet has experienced exponential growth in China.⁴ According to PRC data, the number of Internet users in China (not including Hong Kong, Macau, and Taiwan), which has the second

¹ OpenNet Initiative, "Internet Filtering in China in 2004-2005: A Country Study," April 2005, [<http://www.opennetinitiative.net/studies/china/>].

² He Qinglian, "Media Control in China," November 4, 2004, *China Rights Forum*, [<http://www.hrichina.org/public/contents/8991>].

³ This report is a revised version of the original report by Michelle W. Lau.

⁴ Shanthi Kalathil and Taylor C. Boas, "Wired for Modernization in China" in *Open Networks Closed Regimes*, 13 (Washington DC: Carnegie Endowment, 2003). For an overview of the earlier development of China's Internet industry, see CRS Report RL30636, *China's Internet Industry*, by Thomas Lum.

largest Internet population in the world, reached 111 million in 2005.⁵ An official report also finds that over half of the users have broadband access (51%), 55% have a college degree, 60% are male, and 71% are young (under age 30).⁶ Another study estimates that there are currently up to 134 million Chinese Internet users, approximately a fivefold increase from 23 million in 2001.⁷ Although 103 million or 134 million would account for only 8% or 10% of China's population, respectively, Internet usage is expected to rise as China continues to promote Internet development and enjoy rapid economic growth.

As in the United States, the Internet has already transformed the daily lives of many people in China. Chinese citizens are able to use the Internet to communicate with others, find entertainment, engage in commercial activities, obtain government services, access a wide variety of cultural, social, and academic information, and, for some users, learn about or discuss sensitive political news, if only fleetingly.⁸ Despite censorship of news, the Internet in China often disseminates forbidden information and opinions through e-mail, instant messaging, blogs, and bulletin board forums or through political expressions disguised as non-political comments. However, nearly all such communications are eventually censored and offending texts are deleted by PRC authorities.⁹ Chinese studies have found that the majority of Internet users in China use the Internet for entertainment purposes.¹⁰ Notwithstanding, the PRC government strictly controls news and political content online, which has drawn the attention and criticism of many analysts and U.S. policymakers.

Censorship and Content Control of the Internet

During the early days of the Internet in China, some observers hoped that greater access to information brought about by this new technology would also encourage political expression and democracy in China. Although there has been a documented expansion in the scope of permissible private speech in recent years, the Chinese

⁵ "More than 111M Chinese Log on," *Australian Broadcasting Corporation News*, January 19, 2006.

⁶ China Internet Network Information Center (CNNIC), *16th Statistical Survey Report on the Internet Development in China*, July 2005. Latest data can be found at [<http://www.cnnic.net.cn>].

⁷ "Net User Tally in China Nears 134 million," *South China Morning Post*, February 4, 2005, at [<http://www.asiamedia.ucla.edu/article.asp?parentid=20477>]. Kalathil and Boas, op. cit., 23.

⁸ "China: News agency reports on role of internet in people's lives," *Xinhua News Agency*, October 7, 2005, accessed via BBC Monitoring Media.

⁹ "In China, Information Slips Through the Net," *Washington Post*, January 15, 2006; Bruce Einhorn, "How China Controls the Internet," *BusinessWeek Online*.

¹⁰ Guo Liang, *Surveying Internet Usage and Impact in Twelve Chinese Cities* (Beijing: Research Center for on Social Development, Chinese Academy of Social Sciences, 2005).

government has also intensified efforts to monitor and control use of the Internet and wireless technologies (e.g. cellular phones).¹¹

An often cited empirical study by the OpenNet Initiative (a collaboration between Harvard Law School, University of Toronto Citizen Lab, and Cambridge Security Program) found that China has the most sophisticated content-filtering Internet regime in the world.¹² Compared to similar efforts in other countries, the Chinese government effectively filters content by employing multiple methods of regulation and technical controls. The PRC-sponsored news agency, Xinhua, stated that censorship targets “superstitious, pornographic, violence-related, gambling and other harmful information.”¹³ However, many observers are concerned about the pervasive filtering of any content that the Communist Party of China views as politically objectionable. Informational websites, including that of the BBC, Voice of America, Radio Free Asia, and the public encyclopedia, Wikipedia, have been regularly blocked in China, while other news sources, such as the *New York Times*, the *Washington Post*, the *South China Morning Post* (Hong Kong), and CNN have been intermittently blocked.¹⁴ Sites that carry news in Chinese language generally face greater censorship obstacles than English-only sites.

In addition to censorship of news reports that may present the government in a negative light, the Internet is used to channel and influence public opinion, especially in support of nationalistic sentiments. *The People’s Daily*, a state-sponsored newspaper, has an online bulletin board called the “Strong Nation Forum,” intended for discussion on how to make China a stronger nation. The forum hosted angry anti-Japanese postings in April 2005, during a political fallout between China and Japan concerning Japan’s alleged re-writing of wartime atrocities in its history textbooks.¹⁵

Earlier that year, however, when users visited the forum to mourn the death of former Communist Party General Secretary Zhao Ziyang, moderators promptly removed messages of condolence. Zhao had been stripped of his government position in 1989 largely for sympathizing with Tiananmen student protesters, and was placed under house arrest. His death in 2005 received only muted attention in the national media, reflecting the government’s fear of renewing public calls for a reversal of the official verdict on the Tiananmen demonstrations and the rehabilitation of those condemned during the crackdown.¹⁶

¹¹ U.S. Department of State, Bureau of Democracy, Human Rights, and Labor, *Country Reports on Human Rights Practices, 2004 — China* (February 2005).

¹² OpenNet Initiative, op. cit., 3.

¹³ Chen Siwu and Yu Hong, “China Holds Forum on ‘Cleaning’ Internet,” *Xinhua News Agency*, October 17, 2005 (BBC Monitoring Asia Pacific).

¹⁴ “China Blocks Access to Internet Encyclopedia,” *Kyodo News*, October 26, 2005, Open Net Initiative, op. cit.

¹⁵ “China, Japan Eye Textbook Tension,” *BBC World Monitoring*, April 11, 2005.

¹⁶ “Muted Goodbye to Chinese Reformer,” *BBC News*, January 29, 2005.

Methods of PRC Internet Censorship and Content Control

In order to suppress politically sensitive or undesirable content online, the PRC has adopted two main strategies. First, the Chinese government employs a complex system of regulations, surveillance, and punitive action to promote self-censorship among the public. Second, the government uses technology and human monitors to physically filter unwanted content.

Legal Regulations

Since the commercialization of the Internet in 1995, the PRC government has issued extensive regulations regarding Internet usage. Because these regulations often overlap, are regularly updated, and are created and carried out by multiple government agencies, the legal infrastructure regarding Internet usage in China is extraordinarily complex. At least 12 different government agencies are involved in Internet regulation, which are directed at Internet service and content providers, cyber-café operators, and Internet users themselves.¹⁷

Internet service providers (ISPs) must obtain an operating license from the Ministry of Information Industry (MII) and record each customer's account number, phone number, IP address, sites visited, and time spent online. Internet content providers (ICPs) that publish information, operate electronic bulletin boards, or engage in journalism must record all content made available and the date it was issued. For both service and content providers, these records must be maintained for 60 days and surrendered to relevant government agencies upon request.¹⁸ After obtaining permission to open an Internet café, café operators are required to install software that blocks pornographic and "subversive" content, keep detailed logs linking users to the pages they visited and record visits to any blocked pages, and report these to the Public Security Bureau.¹⁹ As with ISPs and ICPs, cafes must retain this information for 60 days. PRC authorities reportedly closed 47,000 unlicensed Internet cafes in 2004 while installing monitoring software in others.²⁰

In addition to regulations directed at Internet service and content providers, this complex legal infrastructure is also extended to Internet users themselves. The Ministry of Public Security took initial steps to control Internet use in 1997 when it issued comprehensive regulations governing internet use. Selected portions of three key sections, Articles 4-6, are presented here:

¹⁷ OpenNet Initiative, op. cit., 8. For complete list of these agencies, see Appendix 2.

¹⁸ *Measure for the Administration of Internet Information Services*, September 25, 2000, translation available at [<http://www.cecc.gov/pages/virtualAcad/exp/explaws.php>].

¹⁹ OpenNet Initiative, op. cit., 11.

²⁰ "China Closes 47,000 Internet Cafes in 2004," *Xinhua News Agency*, March 1, 2005 (BBC Monitoring Asia Pacific).

Individuals are prohibited from using the Internet to: harm national security; disclose state secrets; or injure the interests of the state or society [4]. Users are prohibited from using the Internet to create, replicate, retrieve, or transmit information that incites resistance to the PRC Constitution, laws, or administrative regulations; promotes the overthrow of the government or socialist system; undermines national unification; distorts the truth, spreads rumors, or destroys social order; or provides sexually suggestive material or encourages gambling, violence, or murder [5]. Users are prohibited from engaging in activities that harm the security of computer information networks and from using networks or changing network resources without prior approval [6].²¹

September 25, 2005 Regulations. On July 1, 2005, Chinese authorities shut down thousands of websites that had not registered with the government. Following this stringent measure, in September 2005, the PRC State Council and the MII announced new rules regarding the administration of the Internet. These new rules formalized interim provisions enacted in 2000, which established general Internet content regulations and a mandatory system of licensing and registration for those engaged in “Internet information services.”²²

In addition to combining and clarifying earlier provisions, the new rules both tighten control over online news services and define them more broadly. They stipulate that private individuals or groups must register as “news organizations” before they can operate websites or e-mail distribution lists that spread news or commentary. Because a news organization is required to employ experienced staff, have registered premises, capital, and a transparent system of operation whereby writings can be attributed, approval will likely be difficult for many individuals and private groups.²³ Websites and popular Internet portals such as Sina.com or Sohu.com must publish only news items, without commentary, even though commentary is often a staple of Web-logs, or “blogs.”²⁴ According to the PRC news agency, Xinhua, electronic bulletin board systems (BBS) and cell-phone text messages that contain news content are also subject to these regulations.²⁵ In addition, two new stipulations indicate increased Communist government concerns about civil unrest. The first bans Internet news services from inciting illegal assemblies, marches and demonstrations; the other prohibits activity on behalf of illegal civil groups.²⁶

²¹ *Computer Information Network and Internet Security, Protection and Management Regulations*, translation and summary in OpenNet Initiative, op. cit.

²² *Rules on the Administration of Internet News Information Services*, translation available at [<http://www.cecc.gov/pages/virtualAcad/index.phpd?showsingle=24396>].

²³ “China Internet: Government Tightens Controls Again,” *Economist Intelligence Unit*, October 12, 2005.

²⁴ Joseph Kahn, “China Tightens its Restrictions for News Media on the Internet,” *New York Times*, September 26, 2005.

²⁵ “China Tightens Supervision over Online News Services,” *China Daily*, September 26, 2005.

²⁶ Anick Jesdanun, “China Targets Tech-savvy Protesters,” *Contra Costa Times*, October 2, 2005.

The complex legal infrastructure governing Internet usage in China also includes punitive measures for those who violate the regulations. Under the September 2005 rules, websites that distribute news without government authorization are under the threat of closure and fines of up to 30,000 yuan (US\$3,700).²⁷ Similar penalties and fees exist for website operators who fail to register with the government, and, in serious cases, their network access would be terminated. However, some Internet portals or websites reportedly often drag their feet when complying with official censorship directives in order to attract or maintain market share.²⁸

Technical Methods of Content Filtering

China censors the Internet through website blocking and key word filtering, primarily at the router level. Routers are devices through which packets of data are directed until they reach their final destination. In China, routers are programmed to channel Uniform Resource Locators (URLs) through proxy servers, which look for politically sensitive words such as “falun” (as in “www.faluninfo.net” of the banned Falun Gong spiritual movement), and send back an error message (e.g., “file not found”) to the Internet user who requested the page. Internet search results are similarly blocked. For example, although the phrase “Taiwan independence,” may not be part of a website URL, entering this phrase into a search engine would result in a URL followed by those words (i.e., <http://www.google.com/search?Taiwan+Independence>), which would trigger the router to filter and block the search results.²⁹ The OpenNet Initiative found that China tolerates occasional over-blocking as the price of preventing access to prohibited sites.³⁰

Cyber-Police, Punitive Action, and Self-Censorship

For those websites that bypass automated filtering, China’s Ministry of Public Security (MPS) reportedly employs 30,000 human monitors, or “cyber-police,” to monitor Internet content.³¹ This cyber-police force, established in 2000, operates as a division within the police departments of 700 cities and provinces in China. Along with investigating online crimes, such as spreading viruses, pornography, or attempting financial fraud, the cyber-police monitor websites and e-mail content and remove objectionable or subversive material.³²

²⁷ “China Internet: Cracking down as China Opens up” *Economist Intelligence Unit*, October 4, 2005.

²⁸ “In China, Information Slips Through the Net,” *op. cit.*

²⁹ Testimony of Kenneth Berman, Director of Information Technology, International Broadcasting Bureau, before the U.S.-China Economic and Security Review Commission, April 14, 2005.

³⁰ OpenNet Initiative, *op. cit.*, 51.

³¹ U.S. Department of State, Bureau of Democracy, Human Rights, and Labor, *op. cit.*; Traci E. Carpenter, “Great Firewall,” *MSNBC.com*, July 21, 2005.

³² Testimony of Xiao Qiang, Director of China Internet Project, UC Berkeley, before the U.S.-China Economic and Security Review Commission, April 14, 2004; and Steven Cherry, (continued...)

In addition to an established Internet police force, the Chinese government solicits help from citizens themselves to monitor Internet content. In July 2004, the MPS established a network of online reporting centers accompanied by a rewards component that encourages citizens to report “illegal” or “harmful” information.³³ Xinhua News Agency disclosed that by October 2004, 50 citizens were rewarded 500-2,000 yuan (\$62-\$247) for reporting pornography and 18 citizens were rewarded 3,000 to 10,000 yuan (\$370-\$1,235) for reporting illegal online gambling. Although Xinhua did not disclose statistics for citizens who reported “subversive” political content, the guidelines on the cyber-police website state that citizen vigilance should not be limited to reporting pornography, but should extend to online political activities as well.³⁴

China reportedly holds between 15 and 54 “cyber dissidents” in prison for posting messages or articles on the Internet that were considered subversive.³⁵ Amnesty International stated that some cyber dissidents were charged with revealing state secrets or endangering state security and received prison sentences of two to twelve years.³⁶ Although the government generally does not prosecute citizens who receive dissident e-mail publications, forwarding such messages sometimes results in detention. The detainment of Internet political writers reflects Chinese repression of free media in general; according to the Committee to Protect Journalists, in 2005, 32 journalists were imprisoned in the PRC.³⁷ Since prohibited topics such as “state secrets” have not been clearly defined by PRC authorities, many reporters, writers, and Internet users exercise self-censorship to avoid the risk of losing their jobs or facing criminal liability.³⁸

U.S. Private Sector Involvement in PRC Internet Censorship

Within the United States, there has been considerable discussion surrounding the alleged complicity of private U.S. companies in the development and maintenance of PRC Internet filtering. Some contend that when presented with large profit potential, U.S. corporations are willing to overlook violations of freedom of

³² (...continued)

“The Net Effect,” *Spectrum*, June 2005.

³³ Foreign Broadcasting Information Service (FBIS), “Analysis: PRC Solicits Citizen Help in Controlling Internet Content,” August 19, 2005.

³⁴ [<http://cyberpolice.cn>].

³⁵ Jonathan Watts, “Internet Censorship,” *The Guardian*, January 25, 2006; “USA: Watchdog Claims China and Cuba are Top Jailers of Journalists,” *BBC*, December 14, 2005; “Internet Under Surveillance 2004,” *Reporters Sans Frontieres*, at [<http://www.rsf.org>].

³⁶ “Controls Tighten as Internet Activism Grows,” *Amnesty International*, January 28, 2004.

³⁷ Testimony of Frank Smyth, Representative from the Committee to Protect Journalists, before the U.S.-China Economic and Security Review Commission, on April 14, 2005.

³⁸ He Qinglian, op. cit.

expression in China. Others argue that, despite problems with censorship regarding a limited number of topics, U.S. investment in China's Internet industry has led to the greater flow of global information in the country.

Some analysts suggest that China's sophisticated Internet infrastructure would not be possible without technology and equipment imported from U.S. and other foreign companies. For China's latest network upgrade, "CN2," which began in mid-2004, two U.S. companies, Cisco Systems and Juniper Networks, were granted four out of six contracts. Cisco Systems, a U.S. telecommunications equipment company, has previously faced allegations that it assisted China in developing censorship capabilities.³⁹ In its recent router contract for CN2, Cisco will provide China with its 12000 Series routers, which are equipped with filtering capability typically used to prevent Internet attacks (i.e., worms and viruses). This technology can also be used by PRC authorities to block politically sensitive content.⁴⁰ Derek Bambauer, a researcher at the OpenNet Initiative, believes that without this upgrade, routers in China are not searching deeply within packets of data for banned keywords, because it would put an enormous load on the routers. Some contend that Cisco routers and the CN2 network upgrade may enable Chinese authorities to employ more sophisticated keyword filtering.⁴¹ Cisco denies allegations that it has altered its products to suit the objectives of PRC cyber-policing. Cisco has declared that it does not tailor its products to the China market, and the products it sells in China are the same as those in other countries.⁴²

In addition to U.S. companies, such as Cisco, that provide hardware, a number of U.S. software and Internet service providers, such as Yahoo and Microsoft, have been accused of complying with censorship in China.⁴³ In 2002, Yahoo was condemned by human rights groups for voluntarily signing a pledge of "self-discipline," promising to follow China's censorship laws. In June 2005, Microsoft's blog-hosting service, MSN Spaces, began removing words like "democracy" and "human rights" from use in Chinese blog titles and postings.⁴⁴ In December 2005, human rights activists criticized Microsoft after the company, at the PRC government's behest, removed the MSN Spaces Web log of a well-known Chinese journalist, Zhao Jing. Zhao, who worked for the Beijing Bureau of the *New York Times*, occasionally broached sensitive political topics on his blog, such as a recent strike at a city newspaper. In January 2006, Microsoft announced a new policy for foreign countries whereby the company would close personal Web logs only if

³⁹ Ethan Gutman, *Losing the New China: A Story of American Commerce, Desire, and Betrayal*, Encounter Books, 2004.

⁴⁰ The OpenNet Initiative, op cit.

⁴¹ Steven Cherry, "The Net Effect," *Spectrum*, Electrical and Electronics Engineers, Inc. (IEEE), June 2005.

⁴² Kevin Poulsen, "Critics Squeeze Cisco Over China," *Wired News*, July 29, 2005, at [<http://www.wired.com>].

⁴³ Tina Rosenberg, "Building the Great Firewall of China, with Foreign Help," *The New York Times*, September 18, 2005; Fang Yuan, "Microsoft Filters 'Democracy' in China" *Radio Free Asia*, June 20, 2005.

⁴⁴ "Microsoft Censors Chinese Blogs," BBC News, June 14, 2005.

presented with a legally-binding order, inform its users of the reason for the removal, and continue to make such blogs accessible in other countries.⁴⁵

In January 2006, Google announced that it would launch a search engine in China. Google's U.S.-based site currently is the second-most popular search engine in China, despite the PRC government's occasional blocking of it, with an estimated 23% share of the market, after the Chinese Internet content provider Baidu (37%) and followed closely by Yahoo (21%). Google will not offer e-mail or blog services in China in order to avoid the possibility of having to divulge private Internet user information to the PRC government. Google reportedly will comply with PRC laws regarding censorship of information deemed inappropriate or illegal, but plans to disclose when such information was removed for censorship purposes.⁴⁶ Paris-based *Reporters without Borders* reacted to the Google announcement by stating that "it was a black day for freedom of expression in China."⁴⁷

Other U.S. companies, such as Secure Computing, Fortinet, and Websense, have also been accused of aiding China's Internet filtering capabilities, but the evidence currently available does not appear to indicate their direct involvement in the PRC government's national censorship system. In 2004, Secure Computing, which makes Internet filtering software, sold authentication systems, or user identification systems, to China's major telecommunications companies. Fortinet sells anti-virus firewall technology to Internet, governmental, educational, retail, and foreign business institutions and establishments in China. Websense reportedly provides Web filtering and monitoring software to Chinese companies. Websense spokespersons have stated that the company has not licensed the PRC government to use its technology to censor personal Internet access and that it would decline to sell its products to the PRC government if they would be used for nationwide censorship purposes.⁴⁸

Yahoo and Shi Tao Case. Yahoo has come under fire for giving the personal e-mail address of a Chinese journalist, Shi Tao, to PRC government authorities, which led to his criminal conviction and sentence of 10 years in prison. In April 2004, Shi, who was an editor at *Contemporary Business News* based in Hunan province, attended an editorial meeting in which government officials read an

⁴⁵ "Microsoft Amends Policies Regarding Blog Shutdowns," *San Jose Mercury News*, January 31, 2006.

⁴⁶ Most search engines in China will simply post a message, "This page cannot be displayed" when requested information is censored.

⁴⁷ [<http://www.rsf.org>]

⁴⁸ Amnesty International, "State Control of the Internet in China," November 26, 2002; Amnesty International, "Controls Tighten as Internet Activism Grows," January 28, 2004; "Secure Computing Extends Strong Authentication Leadership in China Telecommunications Market with China Telecom Win" [<http://www.securecomputing.com/news>], February 10, 2004; "Fortinet Adds to Growing Customer Base in China," *Market Wire News* [<http://www.marketwire.com>], March 25, 2003; "Companies Defend Against Chinese Censorship," *Network World* [<http://www.networkworld.com>], December 2, 2002; Statement from Websense representative, February 10, 2006.

internal document outlining media restrictions before the 15th anniversary of the 1989 Tiananmen Square crackdown in June 2004. Shi sent copies of his notes via his personal Yahoo e-mail account to a pro-democracy organization in the United States. PRC state security authorities later requested information from Yahoo that enabled them to identify Shi and use it in his conviction. Jerry Yang, co-founder and senior executive of Yahoo, confirmed that his company gave Chinese authorities information and described the company's compliance as part of the legal burden of doing business in China.⁴⁹

U.S. Government Efforts to Promote Unrestricted Internet Access in China

Some U.S. officials have expressed their belief that the growth of the Internet and other information technologies will help bring about wide-scale democratization abroad. Former U.S. Secretaries of State James A. Baker and Madeleine Albright are quoted as supporting information technologies in foreign countries as a way to promote their eventual democratization.⁵⁰ U.S. Secretary of Defense Donald Rumsfeld has also made statements on the importance of political freedoms in China: "Every society has to be vigilant against another type of Great Wall ... a wall that limits speech, information, and choices."⁵¹ The State Department has censured the Chinese government by including an explanation of the PRC's media and Internet controls and related persecution of political dissidents in its annual human rights report.⁵² However, aside from diplomatic rebukes of China's restrictions on freedom expression, U.S. actions to combat Internet censorship in China have primarily been in the form of funding for anti-censorship software.

Congressional Action

In the 108th Congress, Representatives Christopher Cox and Tom Lantos and other Members introduced The Global Internet Freedom Act (H.R. 48), a bill to establish an Office of Global Internet Freedom and to develop and implement strategies to combat state-sponsored Internet jamming and persecution of those who use the Internet. In the 109th Congress, Representative Cox reintroduced the Global Internet Freedom Act as H.R. 2216. The bill was referred to the House Committee on International Relations. On February 1, 2006, the Congressional Human Rights Caucus held a hearing entitled, "Human Rights and the Internet — The People's Republic of China." On February 15, 2006, the Subcommittee on Africa, Global

⁴⁹ Peter S. Goodman, "Yahoo Says it gave China Internet Data," *Washington Post*, September 11, 2005.

⁵⁰ Randolph Kluver, "US and China Policy Expectations of the Internet" *China Information*, vol. 29, no. 2 (2005).

⁵¹ Thom Shanker, "Rumsfeld Urges Openness in China," *Houston Chronicle*, October 19, 2005.

⁵² Department of State, Bureau of Democracy, Human Rights, and Labor, *Country Reports on Human Rights Practices - 2004 (China)*, February 28, 2005.

Human Rights and International Operations of the House International Relations Committee will hold a joint hearing with the Subcommittee on Asia and the Pacific regarding the Internet and censorship in China.

International Broadcasting Bureau. The U.S. Broadcasting Board of Governors (BBG), which oversees the International Broadcasting Bureau (IBB), has promoted Internet freedom in China by focusing on its Voice of America (VOA) and Radio Free Asia (RFA) websites, which are regularly blocked by Chinese authorities. In 2001, the BBG provided \$100,000 to Safeweb Inc., a government contracted company that also had been briefly funded by the CIA, to set up proxy servers to help Chinese Internet users access prohibited information.⁵³ However, within a year, Safeweb's technology was reportedly unsuccessful in protecting user identities.⁵⁴

Since 2003, the BBG has funded Dynamic Internet Technology (DynaWeb) and UltraReach, which have each developed software to enable Chinese Internet users to access VOA and RFA websites (see **Table 1**). Funding for these Chinese programs constitutes about three-fourths of the BBG's global anti-jamming expenditures, which are expected to grow by about 28% in 2006 from the previous year. DynaWeb's website is difficult to block because of "anonymizing" technology that regularly changes its numerical Internet Protocol (IP) address. DynaWeb president, Bill Xia, disclosed that earlier efforts to provide Chinese Internet users with unblocked IP addresses through an e-mail subscription service had failed because censors had also subscribed to the service, and quickly blocked those sites as well.⁵⁵ According to Xia, DynaWeb must evolve according to how China censors the Internet, and that "both parties can always implement new technologies to stay ahead and sustain the advantage." However, in testimony before the Congressional-Executive Commission on China, Xia stated that censors have a "brighter future," because China purchases the most advanced censorship technology from Western companies and has more resources than counter-censorship efforts in the United States.⁵⁶

Table 1. Broadcasting Board of Governors Funding for Counter-Censorship Technology in China

	FY2003	FY2004	FY2005
Dynaweb	\$497,700	\$806,326	\$685,000
UltraReach	\$3,000	\$21,000	\$42,003
Total	\$500,700	\$827,326	\$727,003

Source: Broadcasting Board of Governors.

⁵³ Murray Hiebert, "Counters to Chinese Checkers," *Far Eastern Economic Review*, November 7, 2002.

⁵⁴ Oxblood Ruffin, "Great Firewall of China," *New Scientist* (London), November 9, 2002.

⁵⁵ Bill Xia, president of DynaWeb, "China's Cyber-Wall: Can technology Break Through?" *Testimony before the Congressional-Executive Commission on China*, November 4, 2002.

⁵⁶ *Ibid.*

As of April 2005, Dynamic's homepage was viewed about 90,000 times per day, while UltraReach allows approximately 4,000 visits and 30,000 page views for VOA and 2,600 visits and 28,000 page views for RFA daily.⁵⁷ Visits to these sites reportedly rise when PRC censorship tightens, such as during the SARS outbreak of 2003. The BBG disseminates Chinese-language news summaries, some of which contain critical opinions or stories about China, to recipients in China via e-mail. These e-mails employ techniques that circumvent censorship and include IP addresses of proxy servers through which users may view VOA and RFA reports.⁵⁸

Some U.S. companies are developing software for Chinese Internet users to circumvent the PRC government censorship firewall entirely. In February 2006, Anonymizer Inc., a company that specializes in identity protection technology, announced that it was developing anti-censorship software for Internet users in the PRC. Anonymizer's China program would provide a regularly changing URL which Chinese Internet users could access for unfettered links to the World Wide Web. According to the company, users' identities would also be protected from online tracking and monitoring by the PRC government. Peacefire, a free speech advocacy organization and website, has developed protocols for circumventing Internet blocking programs that can be used by Chinese Web users.⁵⁹

Issues for U.S. Policy

Human rights organizations, U.S. government officials, U.S. Internet companies, and experts on the development of the Internet and censorship in China have made wide-ranging recommendations for expanding Internet freedom in China. These policy suggestions include enacting legal prohibitions on U.S. companies that would aid PRC government censorship efforts; creating U.S. governmental institutions for promoting global Internet freedom; funding the development of counter-censorship technologies; applying greater pressure at the government-to-government level; and establishing codes of conduct for U.S. Internet companies in China that promote free expression within the confines of PRC political and business realities.

Some analysts recommend making laws that would prohibit U.S. companies from locating their servers, offering e-mail services, or selling surveillance and filtering technology in countries with repressive regimes such as China. The U.S.-China Economic and Security Review Commission advocates the creation of an

⁵⁷ James C. Mulvenon, DGI Center for Intelligence Research and Analysis, "Breaching the Great Firewall," *Testimony before the U.S.-China Economic and Security Review Commission*, April 14, 2005.

⁵⁸ Kenneth Berman, Director of Information Technology, International Broadcasting Bureau, "China's State Control Mechanisms and Methods," *Testimony before the U.S.-China Economic and Security Review Commission*, April 14, 2005.

⁵⁹ "Anonymizer to Provide Censor-Free Internet to China" [http://www.anonymizer.com/consumer/media/press_releases/02012006], February 1, 2006. Anonymizer receives funding from the BBG (\$72,000 in 2005) primarily for VOA anti-blocking efforts in Iran. Peacefire received \$24,600 in 2005 from the BBG for counter-censorship objectives globally, including China.

executive branch office that would monitor global Internet censorship and promote the development of anti-censorship technology.⁶⁰ In its annual report for 2005, the Congressional-Executive Commission on China recommended that Congress should appropriate funds to support technologies that would help Chinese citizens access Internet-based information that is officially censored. Some U.S. Internet companies in China argue that their own efforts to resist PRC government demands to comply with censorship norms would be enhanced by higher profile U.S. government pressure on the Chinese government. U.S. Internet companies in China reportedly are also considering how to develop common responses that would attempt to strike a balance between promoting free expression or protesting censorship and operating within an authoritarian political system. For example, some U.S. Internet companies have announced policies of informing users when content is unavailable due to government censorship restrictions and demanding that PRC authorities provide clear legal bases for complying with Chinese government demands regarding censorship and the investigation of Internet users.⁶¹

Some observers hold that there needs to be more demand from Chinese people themselves to obtain uncensored information. They posit that if demand for free information is great enough from within China, the government will be more inclined to loosen its grip on Internet information controls.⁶² When the popular search engine, Google, was blocked in 2002, some observers believe that the Chinese government gave into pressure and lifted the block after only 10 days because of the flood of complaints received from Chinese researchers and Internet users.⁶³

⁶⁰ See Statement of Carolyn Bartholomew before the Congressional Human Rights Caucus Hearing on Human Rights and the Internet — the People's Republic of China, February 1, 2006.

⁶¹ David Barboza, "Version of Google Won't Offer E-Mail or Blogs," *New York Times*, January 25, 2006; "Microsoft Amends Policies Regarding Blog Shutdowns," op. cit.

⁶² Xia, op. cit.

⁶³ November 2005, Interview by author with prominent Chinese researcher, who prefers to be unidentified.